



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1407; Project Identifier MCAI-2022-01043-T; Amendment 39-22321; AD 2023-02-14]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Airbus SAS Model A350-941 and -1041 airplanes. This AD was prompted by reports of potential foreign object debris (FOD) contamination of the thermal relief valve (TRV). This AD requires replacement of affected auxiliary power unit (APU) low-pressure (LP) shut-off valves (SOVs), an inspection to detect fuel leaks of affected engine LP SOVs and APU isolation shut-off valves (ISOVs), and applicable corrective actions, and prohibits installation of affected parts, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference (IBR). The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No.

FAA-2022-1407; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For material identified in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; website easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu.

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at regulations.gov under Docket No. FAA-2022-1407.

FOR FURTHER INFORMATION CONTACT: Dat Le, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 516-228-7317; email Dat.V.Le@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus SAS Model A350-941 and -1041 airplanes. The NPRM published in the *Federal Register* on November 4, 2022 (87 FR 66623). The NPRM was prompted by AD 2022-0157, dated August 4, 2022, issued by EASA, which is the Technical Agent for the Member States of the European Union (EASA AD 2022-0157) (also referred to as the MCAI). The MCAI states that

reports have been received from the manufacturer of the APU, the engine LP SOV, and the APU ISOV of potential FOD contamination of the TRV, which was generated by a quality escape during the manufacturing assembly process. Results of the technical investigation determined that FOD in the TRV may lead to a fuel leakage through the valve. This condition, if not detected and corrected, could, in case of an APU or engine fire, contribute to an uncontrolled fire, possibly resulting in loss of control of the airplane.

In the NPRM, the FAA proposed to require replacement of affected APU LP SOVs, an inspection to detect fuel leaks of affected engine LP SOVs and APU ISOVs, and applicable corrective actions, as specified in EASA AD 2022-0157. The NPRM also proposed to prohibit installation of affected parts. The FAA is issuing this AD to address potential FOD contamination, which could lead to a fuel leak. The unsafe condition, if not addressed, could result in an APU or engine fire and contribute to an uncontrolled fire, possibly resulting in loss of control of the airplane.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1407.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from the Air Line Pilots Association, International (ALPA), who supported the NPRM without change.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition

on this product. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed EASA AD 2022-0157, which specifies procedures for replacement of affected APU LP SOVs with serviceable parts, a special detailed inspection of affected engine LP SOVs and APU ISOVs for discrepancies (leaks), and replacement of discrepant engine LP SOVs and APU ISOVs with serviceable parts. EASA AD 2022-0157 also prohibits installation of an affected APU LP SOV, engine LP SOV, or APU ISOV. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Costs of Compliance

The FAA estimates that this AD affects 69 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Up to 15 work-hours X \$85 per hour = \$585	\$0	\$585	\$40,365

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The agency has no way of determining the number of aircraft that might need on-condition actions:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
Up to 7 work-hours X \$85 per hour = \$595	Up to \$18,000	\$18,595

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2023-02-14 Airbus SAS: Amendment 39-22321; Docket No. FAA-2022-1407; Project Identifier MCAI-2022-01043-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel System.

(e) Unsafe Condition

This AD was prompted by reports of potential foreign object debris (FOD) contamination of the thermal relief valve (TRV). The FAA is issuing this AD to address potential FOD contamination, which could lead to a fuel leak. The unsafe condition, if not addressed, could result in an auxiliary power unit (APU) or engine fire and contribute to an uncontrolled fire, possibly resulting in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2022-0157, dated August 4, 2022 (EASA AD 2022-0157).

(h) Exceptions to EASA AD 2022-0157

(1) Where EASA AD 2022-0157 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where paragraph (3) of EASA AD 2022-0157 specifies “any discrepancy” this AD defines discrepancy as leaks of the APU, the engine low-pressure (LP) shut-off valve (SOV), and the APU isolation shut-off valve (ISOV).

(3) This AD does not adopt the “Remarks” section of EASA AD 2022-0157.

(4) Where the service information referenced in EASA AD 2022-0157 specifies to scrap certain parts, send those parts to the manufacturer, or check spares, this AD does not include that requirement.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2022-0157 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (j)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) Additional Information

For more information about this AD, contact Dat Le, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 516-228-7317; email Dat.V.Le@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0157, dated August 4, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0157, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; website easa.europa.eu. You may find this EASA AD on the EASA website at ad.easa.europa.eu.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on January 27, 2023.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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